## CLAIMS

1. A steam cooker, comprising:

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- a steam generator for generating steam;
- a steam temperature-raising device for raising a temperature of steam coming from the steam generator;
  - a heating chamber provided with a ceiling steam outlet on its ceiling side, in which an object to be cooked is heated by steam supplied from the steam temperature-raising device via the ceiling steam outlet,

said steam temperature-raising device including:

a tray-shaped case having a recessed part which has a sidewall provided with a steam supply port through which steam from the steam generator enters the recessed part, the recessed part having a planar shape that is roughly axisymmetrical with respect to a center line of a steam flow entering through the steam supply port, the tray-shaped case being placed, with an opening of the recessed part directed downward, on the heating chamber at the ceiling steam outlet;

a heater placed in the recessed part such that a planar shape of the heater is roughly axisymmetrical with respect to said center line; and

a spiral heat radiation fin wound around the heater and having a fin pitch of 10 mm or less.

- 2. The steam cooker according to claim 1, wherein a plurality of steam outlets for supplying steam into the heating chamber sideways are provided, in roughly axisymmetrical arrangement with respect to said center line, in sidewalls facing each other across said center line of the recessed part of the tray-shaped case and on the opposite side of the steam supply port.
- 3. The steam cooker according to claim 1, wherein

  a sidewall on the opposite side of the steam supply port of the recessed part of the tray-shaped case is inclined with respect to a plane roughly perpendicular to said center line.

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4. The steam cooker according to claim 1, wherein the planar shape of the recessed part of the tray-shaped case is a generally pentagonal shape having three sides forming a U-shape and two sides continuous with both ends of the U-shape of the three sides and forming a generally V-shape bent outward, and

the steam supply port is provided in a sidewall corresponding to a central one of the three sides forming the U-shape of the recessed part of the tray-shaped case.

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5. The steam cooker according to claim 1, wherein the planar shape of the recessed part of the tray-shaped case is a shape having three sides forming a U-shape and an arc-shaped outer periphery that is continuous with both ends of the U-shape of the three sides and curves outward, and

the steam supply port is provided in a sidewall corresponding to a central one of the three sides forming the U-shape of the recessed part of the tray-shaped case.

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6. The steam cooker according to claim 4, wherein each of corners of the recessed part of the tray-shaped case has a curved surface so that adjacent sidewalls are smoothly continuous with each other.